Desford in the Air . . . . .

and elevator controls, though good, are quite heavy, and those who value harmonization highly might regard this as a slight weakness. Personally, I have no objection on this type of aircraft when all three controls are light even if in varying degree.

Single-engine Performance

Directional control with one engine idling is remarkably good and critical single-engine speed is hardly distinguishable from stalling speed. The Desford will climb slowly on one engine at heights up to about 2,500ft, and it will hold height at 3,000ft. If the dead engine could be stopped, which might be possible in some cases, performance would, of course, be better. Turns can be made readily in either direction with one engine cut. The stall, which occurs at around 53 m.p.h. with flap down, is as gentle as anyone could wish, and only after prolonged straight sink does a wing offer to drop. The flap-up stall commences at about 60 m.p.h. I.A.S. Recovery from a spin, which after one turn becomes smooth and steep, is positive and rapid.

The Desford's sturdy fixed undercarriage and pitot head mounted as a sight for level flight are shown in this photograph. Mr. J. A. Hart, the Company's test pilot, is flying from the front cockpit.

One rather unusual feature, which makes itself felt when trying the stall or on steep turns and certain aerobatic manœuvres, is a warning shudder at about 15 m.p.h. above the normal stalling speed. If a steep turn is held after this turbulence around the tail is felt, speed can be allowed to drop to a figure at least 10 m.p.h. lower before the true stall occurs. Thus, it is not apparently a normal high-speed stall occasioned by high loading in the manœuvre. A similar manifestation accompanies the over-the-top portion of a loop.

A feature of the Desford is its neat one-piece moulded enclosure. Field of view is first class from both cockpits.

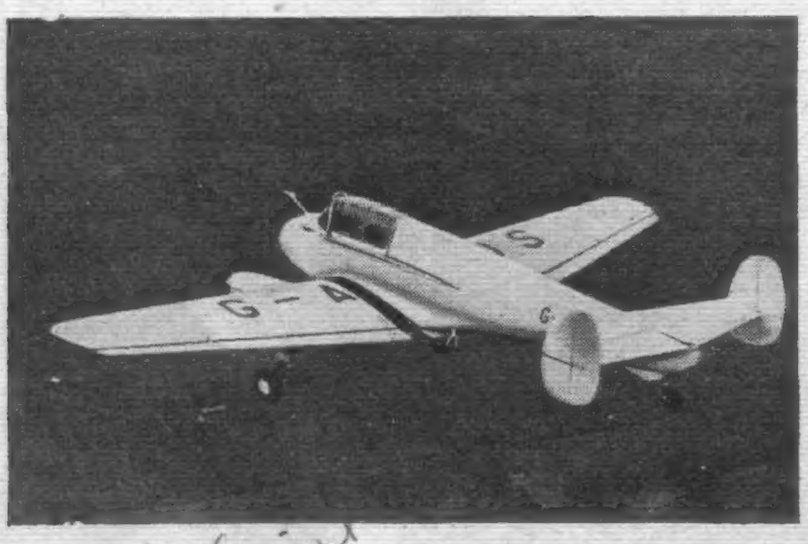
Aerobatics call for no special remarks. All recognized manœuvres can be executed with ease, including a climbing roll. Rolls are more comfortable if slightly barrelled, and the speed should be about 140 m.p.h. Loops can be made from 150 m.p.h. upwards, and for rolls off, about 165 m.p.h. seems sufficient. Care must be taken to avoid over-revving of engines in the dives.

As an aid to straight and level flying, the pitot head is mounted on a long arm on the fuselage nose. It acts as a horizon sight and is most useful as such. Normal cruising speed is around 125 m.p.h. indicated, at 3,000ft. The skid indicator is another potentially useful gadget which, by causing one or other of two red lights to wink at the pilot, indicates occurrence and direction of skid, or, according to the position of an accompanying control, skid in excess of a pre-set number of degrees.

When approaching to land, some flap may be lowered at not more than 100 m.p.h. and a good steep final approach can be held at 80-85 m.p.h., a trickle of power and three-quarters to full flap being desirable. The Desford will side-slip well if need be, and this would be a useful characteristic in the unlikely event of a forced landing being necessary with this fixed-wheel twin.

For landing, a gentle round-out brings one easily into three-point attitude, and from that position the pilot has little feel except with regard to direction. When ready, the aircraft gives a small shudder and "plops" firmly down.

As one would expect, an overshoot presents no problems and the automatic part-raising of flap is effective. Slight change of trim occurs with the raising and lowering of flap; up causes nose-down moment, and vice versa.



In plan view the Desford looks most attractive. The outer wings have straight taper and 5 degrees of dihedral.

In its two and a half years of flying the Desford has proved very easy to maintain and its condition is still excellent. The designer,